

Changtai Zhao

List of Publications by Year in descending order

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200
papers

19,748
citations

8159

76
h-index

11899

134
g-index

202
all docs

202
docs citations

202
times ranked

19161
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultralight and Highly Compressible Graphene Aerogels. <i>Advanced Materials</i> , 2013, 25, 2219-2223.	11.1	1,249
2	Enhancing lithium-sulphur battery performance by strongly binding the discharge products on amino-functionalized reduced graphene oxide. <i>Nature Communications</i> , 2014, 5, 5002.	5.8	892
3	Metal-Organic Framework-Derived Hybrid Carbon Nanocages as a Bifunctional Electrocatalyst for Oxygen Reduction and Evolution. <i>Advanced Materials</i> , 2017, 29, 1700874.	11.1	678
4	Electroactive edge site-enriched nickel-cobalt sulfide into graphene frameworks for high-performance asymmetric supercapacitors. <i>Energy and Environmental Science</i> , 2016, 9, 1299-1307.	15.6	623
5	Sustainable Synthesis and Assembly of Biomass-Derived B/N Co-Doped Carbon Nanosheets with Ultrahigh Aspect Ratio for High-Performance Supercapacitors. <i>Advanced Functional Materials</i> , 2016, 26, 111-119.	7.8	607
6	Design and fabrication of carbon dots for energy conversion and storage. <i>Chemical Society Reviews</i> , 2019, 48, 2315-2337.	18.7	552
7	Determining the limiting factor of the electrochemical stability window for PEO-based solid polymer electrolytes: main chain or terminal -OH group?. <i>Energy and Environmental Science</i> , 2020, 13, 1318-1325.	15.6	342
8	A Layered-Nanospace-Confinement Strategy for the Synthesis of Two-Dimensional Porous Carbon Nanosheets for High-Rate Performance Supercapacitors. <i>Advanced Energy Materials</i> , 2015, 5, 1401761.	10.2	308
9	Ultrafine MoO ₂ -Carbon Microstructures Enable Ultralong-Life Power-Type Sodium Ion Storage by Enhanced Pseudocapacitance. <i>Advanced Energy Materials</i> , 2017, 7, 1602880.	10.2	306
10	Superhierarchical Cobalt-Embedded Nitrogen-Doped Porous Carbon Nanosheets as Two-in-One Hosts for High-Performance Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2018, 30, e1706895.	11.1	300
11	A superhydrophilic -nanoglue- for stabilizing metal hydroxides onto carbon materials for high-energy and ultralong-life asymmetric supercapacitors. <i>Energy and Environmental Science</i> , 2017, 10, 1958-1965.	15.6	294
12	A Flexible TiO ₂ (B)-Based Battery Electrode with Superior Power Rate and Ultralong Cycle Life. <i>Advanced Materials</i> , 2013, 25, 3462-3467.	11.1	286
13	Strategies to suppress hydrogen evolution for highly selective electrocatalytic nitrogen reduction: challenges and perspectives. <i>Energy and Environmental Science</i> , 2021, 14, 1176-1193.	15.6	275
14	Enhanced sodium storage capability enabled by super wide-interlayer-spacing MoS ₂ integrated on carbon fibers. <i>Nano Energy</i> , 2017, 41, 66-74.	8.2	273
15	Iron-tuned super nickel phosphide microstructures with high activity for electrochemical overall water splitting. <i>Nano Energy</i> , 2017, 34, 472-480.	8.2	258
16	3D Architecture Materials Made of NiCoAl-LDH Nanoplates Coupled with NiCo-Carbonate Hydroxide Nanowires Grown on Flexible Graphite Paper for Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , 2014, 4, 1400761.	10.2	251
17	The role of microwave absorption on formation of graphene from graphite oxide. <i>Carbon</i> , 2012, 50, 3267-3273.	5.4	250
18	Strategies and insights towards the intrinsic capacitive properties of MnO ₂ for supercapacitors: Challenges and perspectives. <i>Nano Energy</i> , 2019, 57, 459-472.	8.2	232

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19	3D Porous N-Doped Graphene Frameworks Made of Interconnected Nanocages for Ultrahigh-Rate and Long-Life Li-O ₂ Batteries. <i>Advanced Functional Materials</i> , 2015, 25, 6913-6920.	7.8	231
20	Ultrafast Self-Assembly of Graphene Oxide-Induced Monolithic NiCo-Carbonate Hydroxide Nanowire Architectures with a Superior Volumetric Capacitance for Supercapacitors. <i>Advanced Functional Materials</i> , 2015, 25, 2109-2116.	7.8	230
21	Ultrasensitive Iron-Triggered Nanosized Fe-CoOOH Integrated with Graphene for Highly Efficient Oxygen Evolution. <i>Advanced Energy Materials</i> , 2017, 7, 1602148.	10.2	216
22	Surface modification of biomass-derived hard carbon by grafting porous carbon nanosheets for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15954-15960.	5.2	216
23	Surface-Confined Fabrication of Ultrathin Nickel Cobalt-Layered Double Hydroxide Nanosheets for High-Performance Supercapacitors. <i>Advanced Functional Materials</i> , 2018, 28, 1803272.	7.8	215
24	Facile fabrication of MWCNT-doped NiCoAl-layered double hydroxide nanosheets with enhanced electrochemical performances. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1963-1968.	5.2	193
25	Recent advances in innovative strategies for the CO ₂ electroreduction reaction. <i>Energy and Environmental Science</i> , 2021, 14, 765-780.	15.6	188
26	Chemically Tailoring Coal to Fluorescent Carbon Dots with Tuned Size and Their Capacity for Cu(II) Detection. <i>Small</i> , 2014, 10, 4926-4933.	5.2	186
27	Nanohybrids from NiCoAl-LDH coupled with carbon for pseudocapacitors: understanding the role of nano-structured carbon. <i>Nanoscale</i> , 2014, 6, 3097-3104.	2.8	176
28	NiCo-layered double hydroxides vertically assembled on carbon fiber papers as binder-free high-active electrocatalysts for water oxidation. <i>Carbon</i> , 2016, 110, 1-7.	5.4	175
29	Restructuring of Cu ₂ O to Cu ₂ O@Cu-Metal-Organic Frameworks for Selective Electrochemical Reduction of CO ₂ . <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 9904-9910.	4.0	174
30	Hydrothermal synthesis and activation of graphene-incorporated nitrogen-rich carbon composite for high-performance supercapacitors. <i>Carbon</i> , 2014, 70, 130-141.	5.4	171
31	Rapid and energy-efficient microwave pyrolysis for high-yield production of highly-active bifunctional electrocatalysts for water splitting. <i>Energy and Environmental Science</i> , 2020, 13, 545-553.	15.6	169
32	Toward commercial-level mass-loading electrodes for supercapacitors: opportunities, challenges and perspectives. <i>Energy and Environmental Science</i> , 2021, 14, 576-601.	15.6	166
33	Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFe-Layered Double Hydroxide Assembled on Graphene. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500782.	1.9	165
34	Nitrogen-doped carbon dots decorated on graphene: a novel all-carbon hybrid electrocatalyst for enhanced oxygen reduction reaction. <i>Chemical Communications</i> , 2015, 51, 3419-3422.	2.2	157
35	Scrutinizing Defects and Defect Density of Selenium-Doped Graphene for High-Efficiency Triiodide Reduction in Dye-Sensitized Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4682-4686.	7.2	155
36	Ultrahigh Rate and Long-Life Sodium-Ion Batteries Enabled by Engineered Surface and Near-Surface Reactions. <i>Advanced Materials</i> , 2018, 30, 1702486.	11.1	153

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37	Boric acid-mediated B,N-codoped chitosan-derived porous carbons with a high surface area and greatly improved supercapacitor performance. <i>Nanoscale</i> , 2015, 7, 5120-5125.	2.8	151
38	Porous carbon nanosheets from coal tar for high-performance supercapacitors. <i>Journal of Power Sources</i> , 2017, 357, 41-46.	4.0	150
39	Cobalt-embedded nitrogen-doped hollow carbon nanorods for synergistically immobilizing the discharge products in lithium-sulfur battery. <i>Energy Storage Materials</i> , 2016, 5, 223-229.	9.5	149
40	Nitrogen-Doped Graphene Nanoribbons with Surface Enriched Active Sites and Enhanced Performance for Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1500180.	10.2	147
41	High-area-capacity all-solid-state lithium batteries enabled by rational design of fast ion transport channels in vertically-aligned composite polymer electrodes. <i>Nano Energy</i> , 2019, 61, 567-575.	8.2	126
42	Solvothermal conversion of coal into nitrogen-doped carbon dots with singlet oxygen generation and high quantum yield. <i>Chemical Engineering Journal</i> , 2017, 320, 570-575.	6.6	123
43	Rice husk-based hierarchical porous carbon for high performance supercapacitors: The structure-performance relationship. <i>Carbon</i> , 2020, 161, 432-444.	5.4	121
44	Starch Derived Porous Carbon Nanosheets for High-Performance Photovoltaic Capacitive Deionization. <i>Environmental Science & Technology</i> , 2017, 51, 9244-9251.	4.6	120
45	Natural SEI-Inspired Dual-Protective Layers via Atomic/Molecular Layer Deposition for Long-Life Metallic Lithium Anode. <i>Matter</i> , 2019, 1, 1215-1231.	5.0	120
46	Bridging of Ultrathin NiCo ₂ O ₄ Nanosheets and Graphene with Polyaniline: A Theoretical and Experimental Study. <i>Chemistry of Materials</i> , 2016, 28, 5855-5863.	3.2	116
47	Membrane-Free Hybrid Capacitive Deionization System Based on Redox Reaction for High-Efficiency NaCl Removal. <i>Environmental Science & Technology</i> , 2019, 53, 6292-6301.	4.6	116
48	Single crystal cathodes enabling high-performance all-solid-state lithium-ion batteries. <i>Energy Storage Materials</i> , 2020, 30, 98-103.	9.5	109
49	Recent research advances of self-discharge in supercapacitors: Mechanisms and suppressing strategies. <i>Journal of Energy Chemistry</i> , 2021, 58, 94-109.	7.1	109
50	Hydrothermal Synthesis of Phosphate-Functionalized Carbon Nanotube-Containing Carbon Composites for Supercapacitors with Highly Stable Performance. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 2104-2110.	4.0	107
51	Boron-doped graphene as a high-efficiency counter electrode for dye-sensitized solar cells. <i>Chemical Communications</i> , 2014, 50, 3328.	2.2	107
52	Interconnected sheet-like porous carbons from coal tar by a confined soft-template strategy for supercapacitors. <i>Chemical Engineering Journal</i> , 2018, 350, 49-56.	6.6	107
53	Sulfur-infiltrated graphene-backboned mesoporous carbon nanosheets with a conductive polymer coating for long-life lithium-sulfur batteries. <i>Nanoscale</i> , 2015, 7, 7569-7573.	2.8	106
54	Hierarchical porous carbon sheets derived from biomass containing an activation agent and in-built template for lithium ion batteries. <i>Carbon</i> , 2018, 139, 1085-1092.	5.4	106

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55	Nitrogen-doped hierarchically porous carbon nanosheets derived from polymer/graphene oxide hydrogels for high-performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2020, 560, 69-76.	5.0	106
56	Flexible Paper-like Free-Standing Electrodes by Anchoring Ultrafine SnS ₂ Nanocrystals on Graphene Nanoribbons for High-Performance Sodium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15484-15491.	4.0	102
57	Ultrafast Fabrication of Covalently Cross-Linked Multifunctional Graphene Oxide Monoliths. <i>Advanced Functional Materials</i> , 2014, 24, 4915-4921.	7.8	101
58	Design and Fabrication of Hierarchical NiCoP@MOF Heterostructure with Enhanced Pseudocapacitive Properties. <i>Small</i> , 2021, 17, e2100353.	5.2	101
59	Graphene-mediated highly-dispersed MoS ₂ nanosheets with enhanced triiodide reduction activity for dye-sensitized solar cells. <i>Carbon</i> , 2016, 100, 474-483.	5.4	100
60	Preparation of carbon nanosheets from petroleum asphalt via recyclable molten-salt method for superior lithium and sodium storage. <i>Carbon</i> , 2017, 122, 344-351.	5.4	99
61	Coal-based carbon anodes for high-performance potassium-ion batteries. <i>Carbon</i> , 2019, 147, 574-581.	5.4	98
62	3D nickel-cobalt phosphide heterostructure for high-performance solid-state hybrid supercapacitors. <i>Journal of Power Sources</i> , 2020, 467, 228324.	4.0	97
63	Highly Stable Lithium Metal Anode Interface via Molecular Layer Deposition Zirconium Coatings for Long Life Next-Generation Battery Systems. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15797-15802.	7.2	96
64	Decoupling and correlating the ion transport by engineering 2D carbon nanosheets for enhanced charge storage. <i>Nano Energy</i> , 2019, 64, 103921.	8.2	90
65	Micro-sized porous carbon spheres with ultra-high rate capability for lithium storage. <i>Nanoscale</i> , 2015, 7, 1791-1795.	2.8	88
66	Operando Revealing Dynamic Reconstruction of NiCo Carbonate Hydroxide for High-Rate Energy Storage. <i>Joule</i> , 2020, 4, 673-687.	11.7	88
67	Understanding of Sodium Storage Mechanism in Hard Carbons: Ongoing Development under Debate. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	88
68	Chemically grafting graphene oxide to B,N co-doped graphene via ionic liquid and their superior performance for triiodide reduction. <i>Nano Energy</i> , 2016, 25, 184-192.	8.2	87
69	Synthesis of ultrathin hollow carbon shell from petroleum asphalt for high-performance anode material in lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2016, 286, 632-639.	6.6	86
70	High-Stacking-Density, Superior-Roughness LDH Bridged with Vertically Aligned Graphene for High-Performance Asymmetric Supercapacitors. <i>Small</i> , 2017, 13, 1701288.	5.2	83
71	Strongly Coupled Architectures of Cobalt Phosphide Nanoparticles Assembled on Graphene as Bifunctional Electrocatalysts for Water Splitting. <i>ChemElectroChem</i> , 2016, 3, 719-725.	1.7	82
72	Activation of transition metal oxides by in-situ electro-regulated structure-reconstruction for ultra-efficient oxygen evolution. <i>Nano Energy</i> , 2019, 58, 778-785.	8.2	81

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73	A Universal Converse Voltage Process for Triggering Transition Metal Hybrids In Situ Phase Restruction toward Ultrahigh-Rate Supercapacitors. <i>Advanced Materials</i> , 2019, 31, e1901241.	11.1	81
74	Nanopore-confined g-C ₃ N ₄ nanodots in N, S co-doped hollow porous carbon with boosted capacity for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7133-7141.	5.2	80
75	A closed-loop and scalable process for the production of biomass-derived superhydrophilic carbon for supercapacitors. <i>Green Chemistry</i> , 2021, 23, 3400-3409.	4.6	80
76	Highly stable lithium-sulfur batteries based on n heterojunctions embedded on hollow sheath carbon propelling polysulfides conversion. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9230-9240.	5.2	79
77	Cobalt nitride nanoparticles embedded in porous carbon nanosheet arrays propelling polysulfides conversion for highly stable lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2019, 21, 210-218.	9.5	79
78	Free-standing, hierarchically porous carbon nanotube film as a binder-free electrode for high-energy Li-O ₂ batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12033.	5.2	78
79	CoMn Layered Double Hydroxides/Carbon Nanotubes Architectures as High-Performance Electrocatalysts for the Oxygen Evolution Reaction. <i>ChemElectroChem</i> , 2016, 3, 906-912.	1.7	78
80	Nitrogen-doped mesoporous carbon nanosheets derived from metal-organic frameworks in a molten salt medium for efficient desulfurization. <i>Carbon</i> , 2017, 117, 376-382.	5.4	78
81	Nitrogen-rich carbon coupled multifunctional metal oxide/graphene nanohybrids for long-life lithium storage and efficient oxygen reduction. <i>Nano Energy</i> , 2015, 12, 578-587.	8.2	76
82	Organic amine-grafted carbon quantum dots with tailored surface and enhanced photoluminescence properties. <i>Carbon</i> , 2015, 91, 291-297.	5.4	74
83	Laser Irradiation of Electrode Materials for Energy Storage and Conversion. <i>Matter</i> , 2020, 3, 95-126.	5.0	74
84	Rational design and fabrication of sulfur-doped porous graphene with enhanced performance as a counter electrode in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2280-2287.	5.2	72
85	Self-Templating Synthesis of 3D Hollow Tubular Porous Carbon Derived from Straw Cellulose Waste with Excellent Performance for Supercapacitors. <i>ChemSusChem</i> , 2019, 12, 1390-1400.	3.6	68
86	Phase controllable synthesis of Ni ²⁺ post-modified CoP nanowire for enhanced oxygen evolution. <i>Nano Energy</i> , 2019, 62, 136-143.	8.2	66
87	Dual integration system endowing two-dimensional titanium disulfide with enhanced triiodide reduction performance in dye-sensitized solar cells. <i>Nano Energy</i> , 2016, 22, 59-69.	8.2	65
88	3D Carbon Frameworks for Ultrafast Charge/Discharge Rate Supercapacitors with High Energy-Power Density. <i>Nano-Micro Letters</i> , 2021, 13, 8.	14.4	64
89	Microscopic-Level Insights into the Mechanism of Enhanced NH ₃ Synthesis in Plasma-Enabled Cascade N ₂ Oxidation-Electroreduction System. <i>Journal of the American Chemical Society</i> , 2022, 144, 10193-10200.	6.6	64
90	Decoupling atomic-layer-deposition ultrafine RuO ₂ for high-efficiency and ultralong-life Li-O ₂ batteries. <i>Nano Energy</i> , 2017, 34, 399-407.	8.2	63

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91	Calcined MgAl-Layered Double Hydroxide/Graphene Hybrids for Capacitive Deionization. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 6417-6425.	1.8	59
92	Decoupling the Voltage Hysteresis of Li-Rich Cathodes: Electrochemical Monitoring, Modulation Anionic Redox Chemistry and Theoretical Verifying. <i>Advanced Functional Materials</i> , 2021, 31, .	7.8	59
93	Ultrafast construction of interfacial sites by wet chemical etching to enhance electrocatalytic oxygen evolution. <i>Nano Energy</i> , 2020, 69, 104367.	8.2	58
94	Facile Fabrication of NiCoAl-Layered Metal Oxide/Graphene Nanosheets for Efficient Capacitive Deionization Defluorination. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 31200-31209.	4.0	57
95	Nitrogen-doped hierarchical porous carbon derived from metal-organic aerogel for high performance lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2017, 26, 1282-1290.	7.1	56
96	Is It Appropriate to Use the Nafion Membrane in Electrocatalytic N_2 Reduction?. <i>Small Methods</i> , 2019, 3, 1900474.	4.6	56
97	Unveiling the critical role of interfacial ionic conductivity in all-solid-state lithium batteries. <i>Nano Energy</i> , 2020, 72, 104686.	8.2	56
98	Nitrogen and phosphorus dual-doped graphene as a metal-free high-efficiency electrocatalyst for triiodide reduction. <i>Nanoscale</i> , 2016, 8, 17458-17464.	2.8	55
99	Self-healing electrostatic shield enabling uniform lithium deposition in all-solid-state lithium batteries. <i>Energy Storage Materials</i> , 2019, 22, 194-199.	9.5	55
100	Supramolecular polymerization-assisted synthesis of nitrogen and sulfur dual-doped porous graphene networks from petroleum coke as efficient metal-free electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11331-11339.	5.2	54
101	Engineered Fabrication of Hierarchical Frameworks with Tuned Pore Structure and N,O-Co-Doping for High-Performance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31940-31949.	4.0	53
102	In-situ surface chemical and structural self-reconstruction strategy enables high performance of Li-rich cathode. <i>Nano Energy</i> , 2021, 79, 105459.	8.2	53
103	Synthesis of layered microporous carbons from coal tar by directing, space-confinement and self-sacrificed template strategy for supercapacitors. <i>Electrochimica Acta</i> , 2017, 246, 634-642.	2.6	52
104	Graphene Oxide-Tuned MoS_2 with an Expanded Interlayer for Efficient Hybrid Capacitive Deionization. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9690-9697.	3.2	50
105	Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing. <i>Nano Energy</i> , 2021, 85, 106027.	8.2	50
106	A durable MXene-based zinc ion hybrid supercapacitor with sulfated polysaccharide reinforced hydrogel/electrolyte. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23941-23954.	5.2	49
107	Ultrahigh-Capacity and Long-Life Lithium-Metal Batteries Enabled by Engineering Carbon Nanofiber-Stabilized Graphene Aerogel Film Host. <i>Small</i> , 2018, 14, e1803310.	5.2	48
108	Regulated lithium plating and stripping by a nano-scale gradient inorganic-organic coating for stable lithium metal anodes. <i>Energy and Environmental Science</i> , 2021, 14, 4085-4094.	15.6	48

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109	Strategies to activate inert nitrogen molecules for efficient ammonia electrosynthesis: current status, challenges, and perspectives. <i>Energy and Environmental Science</i> , 2022, 15, 2776-2805.	15.6	48
110	Towards efficient electrocatalysts for oxygen reduction by doping cobalt into graphene-supported graphitic carbon nitride. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19657-19661.	5.2	47
111	Transition of the Reaction from Three-Phase to Two-Phase by Using a Hybrid Conductor for High-Energy-Density High-Rate Solid-State Li-O ₂ Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5821-5826.		47
112	Microwave-Assisted Ultrafast Synthesis of Molybdenum Carbide Nanoparticles Grown on Carbon Matrix for Efficient Hydrogen Evolution Reaction. <i>Small Methods</i> , 2019, 3, 1900259.	4.6	46
113	Electrochemically Driven Coordination Tuning of FeOOH Integrated on Carbon Fiber Paper for Enhanced Oxygen Evolution. <i>Small</i> , 2019, 15, e1901015.	5.2	46
114	Stable Silicon Anodes by Molecular Layer Deposited Artificial Zincone Coatings. <i>Advanced Functional Materials</i> , 2021, 31, 2010526.	7.8	46
115	Halide-based solid-state electrolyte as an interfacial modifier for high performance solid-state Li-O ₂ batteries. <i>Nano Energy</i> , 2020, 75, 105036.	8.2	45
116	Ultrasml diiron phosphide nanodots anchored on graphene sheets with enhanced electrocatalytic activity for hydrogen production via high-efficiency water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16028-16035.	5.2	44
117	Operando Tailoring of Defects and Strains in Corrugated Ni(OH) ₂ Nanosheets for Stable and High-Rate Energy Storage. <i>Advanced Materials</i> , 2021, 33, e2006147.	11.1	44
118	Mismatching integration-enabled strains and defects engineering in LDH microstructure for high-rate and long-life charge storage. <i>Nature Communications</i> , 2022, 13, 1409.	5.8	42
119	A 3D-printed ultra-high Se loading cathode for high energy density quasi-solid-state Li-Se batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 278-286.	5.2	41
120	Three-dimensional hierarchical Na ₃ Fe ₂ (PO ₄) ₃ /C with superior and fast sodium uptake for efficient hybrid capacitive deionization. <i>Desalination</i> , 2021, 520, 115341.	4.0	41
121	Suppressed dendrite formation realized by selective Li deposition in all-solid-state lithium batteries. <i>Energy Storage Materials</i> , 2020, 27, 198-204.	9.5	40
122	3D Porous Garnet/Gel Polymer Hybrid Electrolyte for Safe Solid-State Li-O ₂ Batteries with Long Lifetimes. <i>Chemistry of Materials</i> , 2020, 32, 10113-10119.	3.2	39
123	A multi-interface CoNi-SP/C heterostructure for quasi-solid-state hybrid supercapacitors with a graphene oxide-containing hydrogel electrolyte. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4671-4682.	5.2	39
124	High performance concentration capacitors with graphene hydrogel electrodes for harvesting salinity gradient energy. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4981-4987.	5.2	38
125	Scalable synthesis of 2D hydrogen-substituted graphdiyne on Zn substrate for high-yield N ₂ fixation. <i>Nano Energy</i> , 2020, 78, 105283.	8.2	38
126	Full Bulk-Structure Reconstruction into Amorphorized Cobalt-Iron Oxyhydroxide Nanosheet Electrocatalysts for Greatly Improved Electrocatalytic Activity. <i>Small Methods</i> , 2020, 4, 2000546.	4.6	38

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127	An effective graphene confined strategy to construct active edge sites-enriched nanosheets with enhanced oxygen evolution. <i>Carbon</i> , 2018, 126, 437-442.	5.4	37
128	3D Printing of Free-Standing $\alpha\text{-O}_2$ Breathable Air Electrodes for High-Capacity and Long-Life NaO_2 Batteries. <i>Chemistry of Materials</i> , 2020, 32, 3018-3027.	3.2	37
129	Tailoring the Mechanical and Electrochemical Properties of an Artificial Interphase for High-Performance Metallic Lithium Anode. <i>Advanced Energy Materials</i> , 2020, 10, 2001139.	10.2	36
130	Toward an Understanding of the Enhanced CO_2 Electroreduction in NaCl Electrolyte over CoPc Molecule-Implanted Graphitic Carbon Nitride Catalyst. <i>Advanced Energy Materials</i> , 2021, 11, 2100075.	10.2	36
131	Polystyrene sphere-mediated ultrathin graphene sheet-assembled frameworks for high-power density LiO_2 batteries. <i>Chemical Communications</i> , 2015, 51, 13233-13236.	2.2	35
132	$\text{NiWO}_4/\text{Ni}/\text{Carbon}$ Composite Fibres for Supercapacitors with Excellent Cycling Performance. <i>Electrochimica Acta</i> , 2016, 222, 446-454.	2.6	35
133	Interface Engineering of $\text{Ni}_3\text{N}/\text{Fe}_3\text{N}$ Heterostructure Supported on Carbon Fiber for Enhanced Water Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 14245-14251.	1.8	35
134	Ultralong-Life Quasi-Solid-State LiO_2 Batteries Enabled by Coupling Advanced Air Electrode Design with Li Metal Anode Protection. <i>Small Methods</i> , 2019, 3, 1800437.	4.6	35
135	Polyethyleneimine-Mediated Fabrication of Two-Dimensional Cobalt Sulfide/Graphene Hybrid Nanosheets for High-Performance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26235-26242.	4.0	35
136	Implanting CNT Forest onto Carbon Nanosheets as Multifunctional Hosts for High-Performance Lithium Metal Batteries. <i>Small Methods</i> , 2019, 3, 1800546.	4.6	34
137	Tailor-made graphene aerogels with inbuilt baffle plates by charge-induced template-directed assembly for high-performance Li_2S batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21842-21848.	5.2	33
138	Ternary NiFeMn layered metal oxide (LDO) compounds for capacitive deionization defluoridation: The unique role of Mn. <i>Separation and Purification Technology</i> , 2021, 254, 117667.	3.9	33
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